18 MR. HOFFMAN: I'm from California. I want
19 you to know how badly we need Yucca Mountain to get rid
20 of our nuclear waste at San Onofre Nuclear Waste
21 Generating Station. I want to mention that in June, I
22 asked the Nuclear Regulatory Commission about the
23 dangers of an airplane strike on a nuclear power
24 facility. I spoke to Charles Marshall. He assured me
25 that there wasn't a danger. After the September 11

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1 attacks, the nuclear industry was asked by people who
2 had a better way of twisting their arm than I did to
3 get the answer. The answer is they're not protected.
4 That's why they want Yucca Mountain. I'm against Yucca
5 Mountain because of transportation issues.
6 In 10,000 years, we're going to have a
7 boiling cauldron of hell. You can't get close to it.
8 If transmuting works, then you don't want Yucca
9 Mountain, right? Because that's a permanent
10 repository.
11 What I want to do, I'm going to list -- this
12 is a list of 25 simple ways terrorists could destroy
13 San Onofre Nuclear Generating System and make Southern

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California uninhabitable for under $20,000. This list has been banned in 30 states. As far as I know, it's this kind of thing that made the Nuclear Regulatory Commission take off their entire website today or yesterday. It's gone.

So, number one, hijack a commercial jetliner a la World Trade Center, the Pentagon, and Pennsylvania disasters. If one isn't enough, hijack two. If two isn't enough, hijack 10.

Rent or buy a corporate jet so there are no pesky passengers to take back to the cockpit like what happened in Pennsylvania. It would still do quite a

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bit of damage. If one isn't enough, rent two. If two isn't enough, rent 10.

There is outflow tubes from the reactor. They go about a mile under water and they are marked on all of the sea charts. If you destroy these outflow tubes, you can't cool the reactor. If a tsunami comes in, the waters recede and the tubes can be crushed because there is no more water and this was pointed out to them by tsunami and engineering experts and the commission ignored it. You can drop a bomb on the

outflow tubes.

You can steal a tank. Maybe it's getting harder, but a few years ago in San Diego, somebody stole a tank and drove it for 20 miles. He tried to jump over the Jersey barriers into the oncoming traffic and he got hung up on it. A brave policeman climbed in and, when the guy didn't immediately react, shot him. If they had put locks on the inside so people couldn't get in, who knows where that guy would have gone? Fortunately, he didn't seem to be heading for San Onofre.

50-caliber machine gun bullets could penetrate the coolant pumps, the pipes, control room. You can bicycle up to that plant with a machine gun in a kiddie trailer. There is a state park right around

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it that they built with money to ease the environmental damage from the plant. You can bike up there with a trailer. Stop your truck on I-5 and start blasting away. You can get off probably thousands of rounds before anyone would stop you. The Nuclear Regulatory Commission is not responsible for any of this stuff because they say you have to go to the military if

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you're going to be worrying about these acts of war. Those four airplanes, was that an act of war? Of course, it was. Was the military able to stop it? No, they were not. There is only one way to stop these problems and that's to shut the reactor down. That's what's going to stop us from having to bring it all over here. Once they bring the first 77,000 tons, there will be another 77,000 tons. Where do you think they're going to put that?

Until very recently, the commission had published the GPS locations of the plants to six decimal places. You could launch something from half a planet away and get it there within a yard. Six decimal places is less than a yard.

Throw a short-ciruiting-bomblet or grenade at the switchyard, number seven. That would probably render the plane useless. These things do exist. Nuclear power plant needs reliable offsite power. If

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you destroy the generators and the switchyard, you're going to have a problem.

You can replace various pages of the control room operating manuals with ones that contain

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misinformation so when the operators go to the manuals, they do the wrong thing.

Get an insider to do something. Insiders have access to many vital areas of the plant. There is about 1,400 people that work at the plant. I hope that their backgrounds are being rechecked. With an insider, you can do all kinds of other things.

There is a track that runs between I-5 and the plant, so you could derail a train causing chemical waste and kill anybody near the train. They don't have enough respirators and things for that.

MODERATOR BROWN: If you can summarize in the next minute?

MR. HOFFMAN: That's 11 of them. I've got 25 of them. When we tried to talk about the airplane strikes, we were ignored. I mean, in June, I spoke to the guy and he says that there is no problem. I said, "Would you put that in writing?" He said, "No, I'm not going to put that in writing." I don't blame him. He'd probably be in jail now if he had. There is another 12 or 13 of these things.

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Somebody is going to have to do something. A

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lot of them are easier than the ones I mentioned -- multiple small planes at once, crop-dusters. You know what you put inside, you put gasoline inside the thing and open the vents. How many different ways do you need? This is deadly.

Thank you.

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MR. HOFFMAN: So those, if all those states had 20 monitors, it would be the same. 20 monitors.

MR. WRENN: No, this is geographically around the Nevada test site.

MR. HOFFMAN: Didn't you say earlier the Nevada test site is the size of, like five New England states?

MR. WRENN: I didn't say that.

MS. SNYDER: It's 1375 square miles. Tremendous, bigger than Rhode Island, yes.

MR. HOFFMAN: Yes, 20 monitors for all of that. Okay. This is the NACSTC cask, okay? It's available over there. The reason, this is another one, this is the High Star, this New Homes, the GA 4 from Geneatomics. What's wrong with all of these things? Well, on this one, on the end here, we've got redwood. California redwood, that's an endangered species. I hope you're not going to use too much of it. And then

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around that is balsa wood. Okay? But this thing still weighs 125 tons, metric tons, I guess, 125 tons loaded, it's got 20 tons of waste.

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The problem is that they cost a lot of money. Even this is going to cost a lot of money. And there isn't that much money. Because the nuclear industry has to make a profit somehow, because otherwise they'd close the plants down, and the owners wouldn't have any money. So these, all of these storage systems have to fit within the budget that contains a profitable total.

That's impossible. When you shut the plants down, and you stop pretending this is a moneymaking or even a break-even venture, then you can start putting the money that really needs to go into this. There's what, 76-wheeled vehicle over there they haven't built that they think is going to work. I don't think anyone will recognize it driving down the highway. You know, terrorists or anything like that. But that's not built. That's got years and years to go and millions and millions of dollars. But it's not going to be good enough. None of it's ever going to be good enough until you get away from the idea there is money to be made in nuclear waste or production of nuclear waste. That's all, thank you very much.

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RUSSELL HOFFMAN: My name is Russell Hoffman, R-U-S-S-E-L-L, H-O-F, like in Frank, F like in Frank, M-A-N. I'm from Carlsbad, California. C-A-R-L-S-B-A-D. And the reason that I came here is because there are not any hearings anywhere near where I live. And we have two nuclear power plants in Southern California, with three spent fuel pools.

They want dry cask storage. So we have a large amount of waste, of high-level nuclear waste in

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Southern California. And nobody is -- there's no hearings being held there. I attended the hearing last month on September 5th, and I spoke to the issue of terrorism. I said that the waste where I, being left where I am is susceptible to terrorism. And tsunamis, earthquakes, operator error, faulty equipment, and a wide variety of other problems.

One of the things that I spoke to here, before the hearing, at the poster session, I asked -- I, as I was driving here, I saw a truck accident, or the remnants of a truck accident, and the truck had, the fuel tank had evidently burst and burned. And

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there was nothing left of the truck but the axles, nothing above axle level was left of the cab of the truck.

So I was looking at the posters, and thinking about the Baltimore fire, and I asked one of the Yucca Mountain representatives about what would happen if one of these containers was caught in one of these fires, and I said -- because I had seen this truck, and it worried me. He told me that they would make sure that there was not enough fuel near the container to cause a problem. I said, what about if -- the first thing I said was, the diesel engine itself on a train, carries a lot more fuel than a truck does. And he said that it

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would be separated from the engine by at least one other car, multiple cars perhaps, so that shouldn't be a problem. I said what about a, another train on the track at the same time, on a different track going next to them at the same time, say in that tunnel. What the guy told me was -- and I don't have his name, but he was one of the ones out in front of the poster boards explaining this stuff to whoever would ask -- and what he told me was that they were going to, using

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computers, keep track of every dangerous load on our rail system, that these loads would pass, so that they would not be in the tunnel at the same time. I presume they would not cross each other anywhere at the same time. On any track anywhere in the country.

Well, after September 11th, I realized that not only was it wrong that they were properly considering how much fuel might be in the vicinity of an accident, but they were probably wrong about a lot of other things too. Including the idea that they were going to track all these different types of chemical, biological, fuel, all these different hazardous substances, are all going to be tracked.

It's not -- our computer system is nowhere near that right now. The country's computer system. It's not going to get that way any time soon at the

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rate that -- and I have been in the computer industry for 20 years. My software is used all over the world. It's used in nuclear power plants for training, because it involves pumps. So I'm quite sure that our software is not going to be so good and so well tracked that every viable threat that is also on the rails at the

same time, and on the highways -- most -- a lot of the trucks, a lot of the waste is going to be brought here on highways. There's no way. And if it were properly tracked, if they had every single piece of information they needed to make sure that it didn't cross another path of another load, then that information would be available to the terrorists as well. Senator Bennett, he was talking about that, about the availability of that kind of information.

The other thing I wanted to say was that on, in June of 2001, I called the nuclear regulatory commission to talk to them about a fire that had occurred at our local nuclear power plant, and several other incidents that had occurred at our local nuclear power plant, the last incident being the dropping of an 80,000-pound crane about 50 feet. And I asked Charles Marschall, M-A-R-S-C-H-A-L-L, at the Region Four Nuclear Regulatory Commission, about the possibility of a 747 plane crashing into a nuclear power plant. He

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assured me that it could not do any damage. They were not, they could not be damaged by -- a nuclear power plant by an airplane, that it couldn't go through the

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containment building, and that the rest of it was resistant to that kind of a threat.

September 11th, my local paper called me, and I didn't get back to them in time, but in the September 12th edition of my local paper, I was quoted as saying that that was not true. That these plants were very vulnerable to what we saw on September 11th, and Ray Golden, G-O-L-D-E-N, of Southern California Edison, the spokesperson, was quoted in the same article as saying that they could survive a plane wreck like that.

September 21st, the NRC published a press release admitting they could not survive a plane crash.

The person I spoke to at Yucca Mountain owes me an apology. He owes me -- he owes the public the truth. I asked a couple of questions and submitted them in writing that day, on a piece of paper. I was told I would hear back from them. I never heard back from them. We were given two names to submit documents to. Carol Hanlon, I believe, and Lake Barrett, I think. Lake is out there. Is Carol the other one that's out there? No, I didn't think so.

Okay. I asked them at the hearing if they

had read anything I had submitted. They said that they had not. Is there any human being at Yucca Mountain who will actually answer questions from someone who knows a little bit about the technology, who knows a little bit about engineering, a little bit about radiation, little bit about politics, a little bit about philosophy? Is there anyone that knows enough of all those different topics to be able to answer all the different questions, that knows something about renewable energy, so that there's a way to replace the nuclear power plants?

Somebody today testified that 1,000 windmills at Yucca Mountain, at the test site, would produce 1.5 megawatts of energy. That's 1 1/2 nuclear power plants. We have 1,000-megawatt nuclear power plants. So you could replace that energy with just 1,000 windmills, with 700 windmills, 660. We make, what, 10 million cars in America each year? Hundreds of thousands of buses, trucks, trains, airplanes. We can't build windmills? We can't build solar units? We can't build small-scale hydro? Give me a break. I guess that's it. And I'll make a written submission

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with various parts.

(Mr. Hoffman left the room and returned.)

MR. HOFFMAN: What I would like to know is,

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who is going to read what I have just had transcribed? When are they going to respond to it? And if I don't like their response, what are we going to do about it? Because I've been to these things before. I've submitted -- let me give you one, since nobody else is here, in 1995, '95? No, 1997, I was introduced to a problem called the Cassini Space Probe, C-A-S-S-I-N-I. It's a NASA space probe, with 72.3 pounds of plutonium dioxide on it. A lot of people argued against that launch, because of the dangers of the plutonium. Plutonium 238 most of it.

Less than a year after the launch, NASA lost a Titan IV launch vehicle, the same type that the Cassini was on. After the launch, Cassini flew around space for a while, and then came back to earth to do what's called a fly-by. A gravitational fly-by. This is done to add speed to the probe, so that it would get to Saturn sooner. That's the only purpose of the fly-by. It would get to Saturn anyway, and they could

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do fly-bys by other planets, but they chose to do it by Earth. Because it has some advantages.

But it has some disadvantages. It's extremely dangerous. A minor calculation error -- originally that probe was supposed to fly at 2 -- I think 180 miles above earth. And then progressively

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they would raise the height, 220, 240, 280, 500, until the time of the -- and this is supposedly in response to activists' worries. But the activists didn't want the fly-by at all. And the difference between 180 miles and what it finally flew by at, which was 1,000 kilometers, is a fairly trivial amount in space. A month after the fly-by, a NASA space probe headed from an orbital insertion around Mars crashed into Mars instead. An orbital insertion is a similar maneuver to a fly-by. Except instead of continuing on past the planet, you're captured by the gravitational pull, and circle the planet. But they're very similar.

And the reason that probe crashed was because they made a miscalculation in the weight, because they were translating from pounds to kilograms or kilograms to pounds. The Cassini Space Probe was a joint venture

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between the European Space Agency and NASA, so there were undoubtedly a lot of calculations of kilos to pounds and pounds to kilos, and that crash could most certainly have happened to Cassini, and if it had, it could have resulted in millions of deaths. So I'm quite used to trying to tell the government, the DOE, in particular, about the problems with technology.

I work in the computer field. And I've been writing educational software for 20 years. 15 was

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writing educational, 17 years plus a couple of years before that, so writing educational software for about 17 years. I developed, using assembler language, 100,000 lines of code, a software program that allows me to display animation. Runs on PCs, IBM compatibles. I've distributed programs written with this software for years, over a decade. The last time I recompiled the 100,000-line program was in 1994. Products written with it were pick of the week on Australian bulletin board a couple of years ago. Distributed, I sell it to, you know, 30, 40, 50 countries in the last five or six years. And the distribution is much much greater because I have a lot of free products that I offer to

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schools and things with this same software.

And my point is, that I'm a one-man company, and I don't know how many copies of my software are out there. It's undoubtedly thousands. Could be tens of thousands, maybe hundreds of thousands. But I can handle the support issues. So I know how important really high reliability, I know what it, what can be achieved with a high-level of reliability. 100,000-line program that works, on countless machines, constantly, and I don't get calls. Knock wood. Put down that I knocked wood.

A lot of the problems with Yucca Mountain are

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reliability issues. The problems at San Onofre nuclear generating station where I live, is falling apart. This year they've had two fires, two explosions, a dropped crane. The forks of one of their large forklifts fell. Now people walk under cranes very rarely, under crane loads, extremely rarely, but they walk under forklifts fairly regularly. People aren't that worried about that. You don't think about it that much, but their forklifts fell this year, in I think July, or maybe June. Because the plant's falling

apart. It's on the shore, it's getting rusted and the reliability just isn't there.

The things that they want to have happen, the reliability that they think they're going to have, they have no proof of. Terrorism attacks by airplanes, that was not a credible threat until September 11th. Why not? We've been telling them for 4,000 flights a year of commercial jetliners in America. Now one of those could have fallen on San Onofre by accident. And yet, they never studied it at all? That's just not true.

What really happened is they knew if they studied it, the answer would be, they're not protected against it at all, so they decided to say, we didn't study it. They didn't need to. Now I think I'm done. But I'll be back, I might think of something else.